

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Reserve
1.96
R315N

U.S. DEPT. OF AGRICULTURE
WATER SUPPLY OUTLOOK
FOR
ARIZONA
APR. 14 '76
WATER SECTION
CURRENT JOURNAL CONTENTS



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA WATER COMMISSION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
APR. 1, 1976

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

|||||
Released by

THOMAS G. ROCKENBAUGH
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
PHOENIX, ARIZONA

In Cooperation with

WESLEY E. STEINER
EXECUTIVE DIRECTOR
ARIZONA WATER COMMISSION

KARL F. ABEL
PRESIDENT
SALT RIVER VALLEY WATER
USERS ASSOCIATION

|||||
Report prepared by

RICHARD W. ENZ, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
ROOM 6029 FEDERAL BUILDING
PHOENIX, ARIZONA 85025



Irrigating cotton in the Salt River Valley

ARIZONA SUMMARY
as of
APRIL 1, 1976

NEAR NORMAL WATER SUPPLIES ARE PREDICTED FOR MOST OF ARIZONA THIS YEAR. RESERVOIR STORAGE IS CLOSE TO AVERAGE, BUT RUNOFF IS EXPECTED TO BE SLIGHTLY BELOW AVERAGE.

SNOW COVER

The warm temperatures and absence of significant precipitation has reduced snow cover on all major watersheds. The higher elevations of the White Mountains, however, did receive 10 to 20" of new snow just before the end of the month, but the lighter snowfall below 8,000' was virtually melted in three days. Above average snow pack does exist at many of the higher elevation snow courses such as Mormon Mountain Summit with 51" depth and 22" water equivalent; Baker Butte #2, 46" and 19"; Promontory Butte, 38" and 14.6"; Baldy, 26" and 7.6"; and Hannagan Meadows, 26" and 9.2".

PRECIPITATION

Except for the White Mountains and western New Mexico, precipitation for the second half of March was very light. Many stations on the Verde and Tonto Watersheds reported less than 0.1" of precipitation. One to 2" occurred in the White and Mogollon Mountains at the higher elevations.

SOIL MOISTURE

Surface soils have experienced considerable drying below the snow line, but soil moisture is good at the higher elevations. Additional storms will yield well from the higher elevations, but poorly from the lower elevations.

RESERVOIR STORAGE

Salt River Project reservoirs, containing 63% of capacity, are slightly above normal for this date. San Carlos and Lake Pleasant contain 53% and 78% of average respectively. Most other reservoirs are close to capacity.

STREAMFLOW AND WATER SUPPLY

March streamflow was much below average on all streams due to the early high runoff in February and absence of good storms in March.

Streamflow for the April-May period is predicted to be 75% to 80% of the 1958-72 15-year average. This is much less than that received last year, but well above the long-term median.

Water supplies should be adequate for most of Arizona this year. Considerable pumping will be required, however, on the San Carlos Project and in the upper Gila Valley.

THIS IS THE LAST REPORT FOR 1976.

STREAMFLOW FORECASTS ABOUT APRIL 1 1976

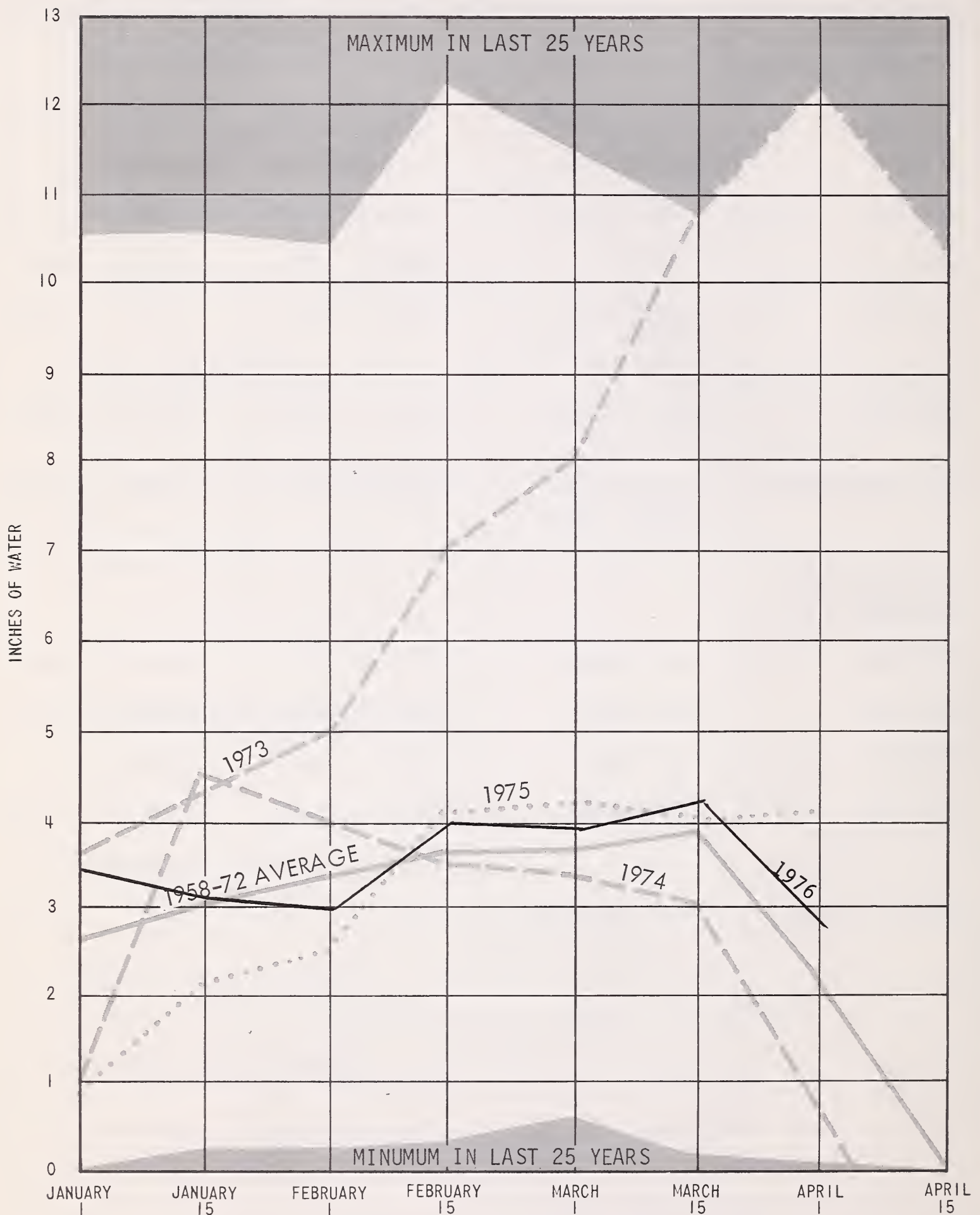
STREAMFLOW FORECASTS		ABOUT APRIL 1 1976		THIS YEAR		PAST RECORD	
BASIN, STREAM and/or FORECAST POINT		FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET		
		Thousand Acre Feet	Percent of Average		Last Year	Average †	
<u>SALT RIVER DRAINAGE</u>							
Salt near Roosevelt	105	74	Apr-May	271.9	142.6		
"	73	74	April	168.8	99.3		
Tonto Creek near Roosevelt	4	48	Apr-May	26.3	8.4		
"	3	43	April	23.5	7.0		
Verde River above Horseshoe	42	78	Apr-May	93.2	54.0		
"	32	73	April	79.4	43.9		
Total Salt River Project Streams	151	74	Apr-May	391.4	205.0		
"	108	72	April	271.7	150.2		
<u>GILA RIVER DRAINAGE</u>							
Gila River at Calva	11	46	Apr-May	33.8	23.5		
Gila River near Gila	18	90	Apr-May	37.2	20.0		
Gila River near Solomon	36	81	Apr-May	75.0	44.3		
"	27	84	April	52.9	31.8		
Gila River near Virden	20	87	Apr-May	40.2	22.8		
Frisko River at Clifton	18	76	Apr-May	35.2	23.6		
Frisko River at Glenwood	8	74	Apr-May	19.9	10.7		
<u>LITTLE COLORADO RIVER DRAINAGE</u>							
Little Colo. River above Lyman Dam	4.2	54	Apr-June	11.8	7.8		
Lake Mary Inflow	.6	40	Mar-May	2.6	1.5		
Little Colo. River at Greer 1/	4.5	79	Apr-June	---	5.7*		
<u>GRANITE CREEK DRAINAGE</u>							
Granite Creek	.2	---	Apr-May	---	---		
Willow Creek	.1	---	Apr-May	---	---		
<u>MIMBRES RIVER DRAINAGE</u>							
Mimbres River near Mimbres	1.3	81	Apr-May	4.3	1.6		
<u>COLORADO RIVER DRAINAGE</u>							
Virgin River nr. Littlefield	42	97	Apr-June	22.5	43.2		
Colorado - Lake Powell Inflow	7,203	105	Apr-July	10,407	---		
1/ Corrected for Filler Ditch Diversion. † Based on the 15-year period, 1958-72. (*) Average is for less than 15 years.							

ABOUT APRIL 1, 1976

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

BASIN or STREAM	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
<u>GILA RIVER DRAINAGE</u>					
Agua Fria	Lake Pleasant	157.6	49.0	53.2	62.3
Granite	Watson Lake	4.7	4.5	1.8	3.5
Granite	Willow Creek	6.1	2.4	0.9	3.0
Gila	San Carlos	1,093	106.3	241.5	199.7
Salt (4)	Roosevelt, Apache, Canyon & Saguaro	1,755	1168.3	1,159	1,145
Verde (2)	Bartlett and Horseshoe	317.7	135.8	79.9	158.2
Salt and Verde	6 Salt River Project Reservoirs	2,073	1304.0	1,239	1,303
<u>COLORADO RIVER DRAINAGE</u>					
Colorado	Lake Havasu	619.4	553.9	554.1	555.4
Colorado	Lake Mohave	1,810	1654.7	1,604	1,675
Colorado	Lake Mead	26,159	20,307	19,764	16,927
Colorado	Lake Powell	25,002	19,737	17,294	7,352*
Little Colorado	Lyman	30.6	21.6	14.0	15.0
Little Colorado	Show Low Lake	5.1	1.2	5.1	2.4
† Based on 15-year period, 1958-72					
* Average is for less than 15 years of record					

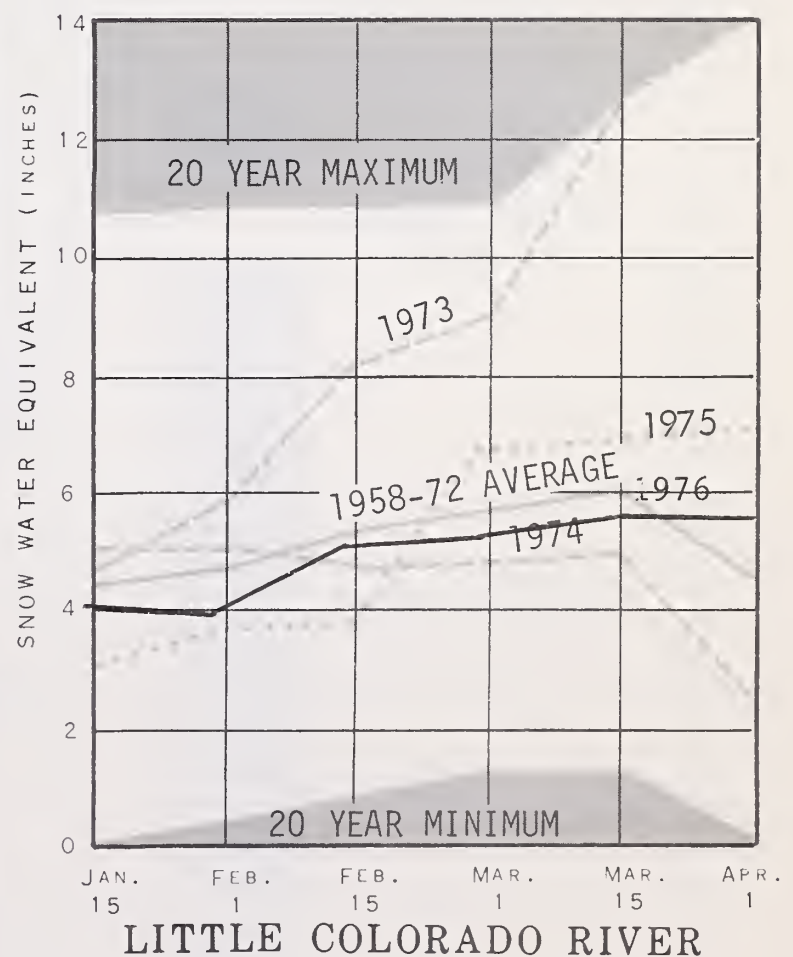
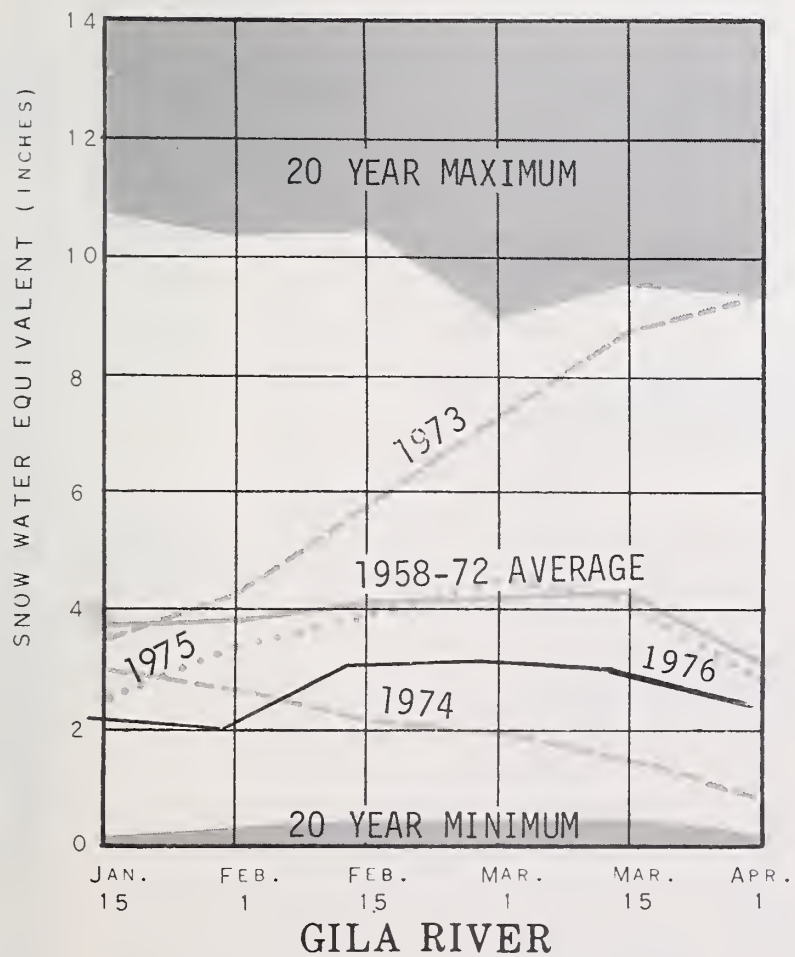
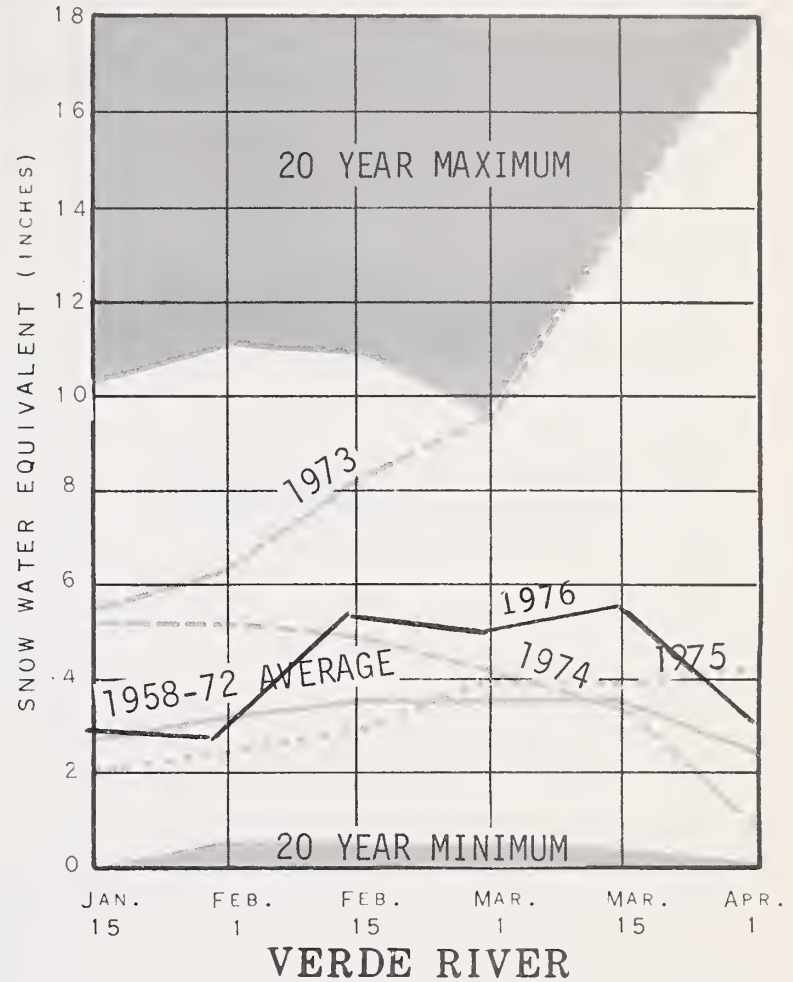
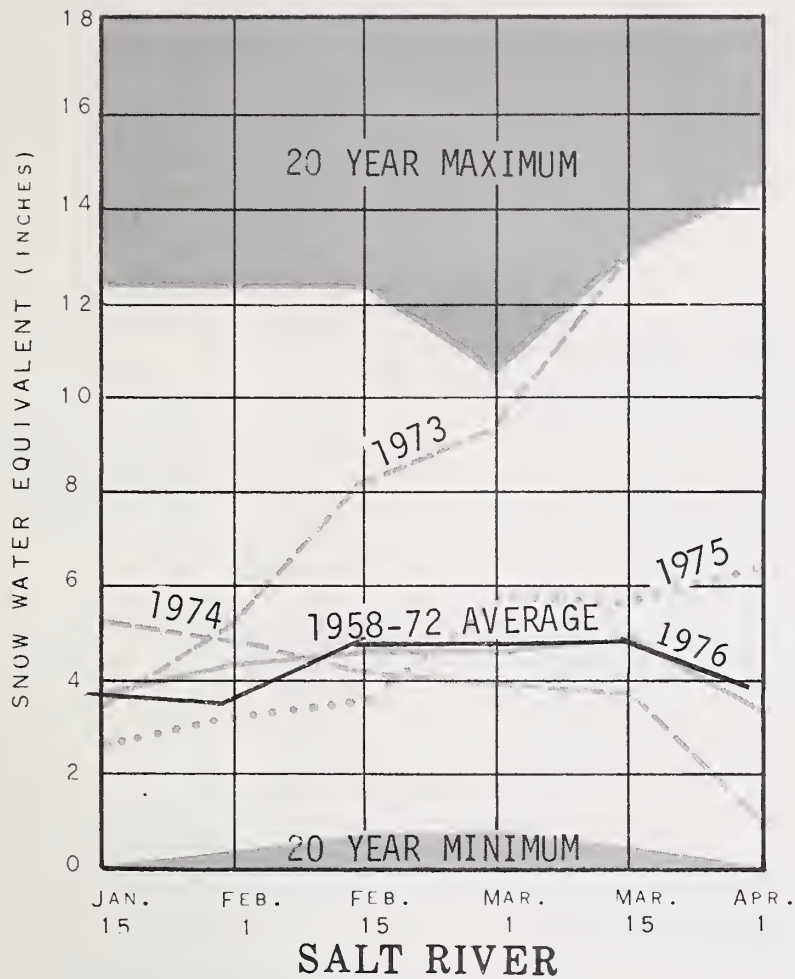
AVERAGE SNOW COVER ARIZONA 1976



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

1976

WATERSHED SNOW COVER



BASED ON SELECTED SNOW SURVEY COURSES

[illegible]

WATER SUPPLY INVENTORY SALT RIVER VALLEY SYSTEM

IN ACRE-FEET
APRIL 1, 1976

3,000,000

AVERAGE SUPPLY
ON APRIL 1

ANTICIPATED 1976 SUPPLY *

2,500,000

2,000,000

1,500,000

1,000,000

500,000

0

Average Spring
Runoff

Average Summer
Runoff

Average
Storage

Forecast Runoff
(April-May)

Average Summer
Runoff

Present Storage

Based on Present Storage + Forecast Spring Runoff + Average Summer Runoff

SNOW ABOUT APRIL 1, 1976

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
GILA RIVER						
Bear Wallow	8100	3/31	0	0.0	2.4	2.9
Beaver Head	8000	3/31	6	0.7	1.5	1.7
Coronado Trail	8000	3/31	4	0.7	0.4	0.7
Emory Pass #1 *	7800	3/31	0	0.0	0.1	0.0**
Emory Pass #2 *	7800	3/31	0	0.0	0.1	0.0**
Frisco Divide	8000	3/31	4	0.6	0.9	0.6
Hannagan Meadows *	9090	3/31	26	9.1	11.3	8.0**
Hummingbird (A)	10550	4/1	45	14.0	21.8	15.1**
McKnight Cabin * (A)	9300	---	--	---	6.3	2.4**
Mogollon	7000	3/30	0	0.0	0.0	0.0
Nutriosio	8500	3/31	2	0.3	1.8	0.5
Redstone Trail	8600	3/30	17	5.1	8.5	7.0**
Rose Canyon	7300	3/31	0	0.0	1.4	0.5
Silver Creek Divide	9000	3/30	28	8.4	12.3	11.5**
State Line	8000	3/31	4	0.6	0.3	0.6
Whitewater (A)	10750	3/31	64	17.9	27.8	20.2**
VERDE RIVER						
Baker Butte	7300	3/30	10	4.5	4.7	3.6**
Baker Butte #2	7700	3/30	46	19.0	15.9	---
Camp Wood	5700	3/31	0	0.0	0.0	0.1
Chalender *	7100	3/31	0	0.0	1.7	1.0
Copper Basin Divide	6720	4/1	0	0.0	0.2	0.0**
Fort Valley	7350	3/31	0	0.0	0.0	1.1
Gaddes Canyon	7600	3/28	14	5.3	5.8	3.6
Happy Jack	7630	3/31	1	0.4	2.9	1.4
Iron Springs *	6200	4/1	0	0.0	0.0	0.1
Mingus Mountain	7100	3/28	0	0.0	0.7	0.1
Mormon Lake *	7350	3/31	5	1.9	3.6	1.7
Mormon Mountain	7500	3/31	12	5.2	7.2	3.0
Newman Park	6750	3/31	0	0.0	0.6	0.6**
Snow Bowl #1	10260	3/31	33	11.2	15.0	10.3**
Snow Bowl #2	11000	3/31	52	17.2	20.8	19.5**
White Horse Lake Jct.	7150	3/31	0	0.0	2.3	1.2**
White Spar	6000	4/1	0	0.0	0.1	0.0**
LOWER COLORADO RIVER						
Bill Williams Intermediate	8550	3/31	29	11.8	10.5	6.3**
Bill Williams Summit	8950	3/31	44	15.9	14.4	9.3**
Chalender *	7100	3/31	0	0.0	1.7	1.0
Fort Valley	7350	3/31	0	0.0	0.0	1.1
Grand Canyon	7500	3/31	0	0.0	1.6	0.6
Williams Ski Run	7720	3/31	32	12.2	10.8	5.8**

† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted Average. (A) Aerial observation: water content estimated.

SNOW ABOUT APRIL 1, 1976

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average †
NAME	Elevation					
SALT RIVER						
Baldy *	9125	3/31	26	7.6	10.3	6.2
Beaver Head	8000	3/31	6	1.0	1.5	1.7
Canyon Creek	7500	3/30	5	1.3	4.4	1.3
Canyon Point	7600	3/30	4	0.9	4.2	1.2**
Coronado Trail	8000	3/31	4	0.7	0.4	0.7
Forest Dale	6430	3/31	0	0.0	0.4	0.0
Ft. Apache	9160	3/31	26	7.3	10.4	6.3
Hannagan Meadows	9090	3/31	26	9.2	11.3	8.0**
Hawley Lake	8300	3/31	24	8.4	8.8	3.6**
Heber	7600	3/30	5	1.4	3.9	1.5
Maverick Fork	9050	3/31	34	9.9	12.8	7.5
McNary	7200	3/31	4	0.9	1.0	0.4
Milk Ranch	7000	3/31	0	0.0	0.6	0.1
Mt. Ord (A)	11000	REPORT	DELAYED		32.5	26.4**
Nutriosos *	8500	3/31	2	0.3	1.8	0.5
Promontory Butte	7930	3/30	38	14.6	16.6	---
Smith Cienega (A)	9850	REPORT	DELAYED		27.2	19.8**
Sunrise Summit	10600	3/30	63	17.4	19.7	---
Wilson Lake	9000	3/29	41	10.8	13.8	9.0**
Workman Creek	6900	3/28	0	0.0	2.8	2.8
LITTLE COLORADO RIVER						
Baldy	9125	3/31	26	7.6	10.3	6.2
Canyon Creek	7500	3/30	5	1.3	4.4	1.3
Canyon Point	7600	3/30	4	0.9	4.2	1.2**
Cheese Springs	8600	3/30	23	4.7	8.5	7.4**
Forest Dale	6430	3/31	0	0.0	0.4	0.0
Ft. Apache	9160	3/31	26	7.3	10.4	6.3
Fort Valley	7350	3/31	0	0.0	0.0	1.1
Happy Jack *	7630	3/31	1	0.4	2.9	1.4
Heber	7600	3/30	5	1.4	3.9	1.5
Inner Basin #1	10100	3/30	57	20.9	20.4	17.3**
Inner Basin #2	9750	3/30	40	14.2	12.5	10.2**
Lake Mary	6970	3/31	0	0.0	---	---
McNary	7200	3/31	4	0.9	1.0	0.4
Mormon Lake	7350	3/31	5	1.9	3.6	1.7
Mormon Mountain	7500	3/31	12	5.2	7.2	3.0
Nutriosos *	8500	3/31	2	0.3	1.8	0.5
Promontory Butte	7930	3/30	38	14.6	16.6	---
Snow Bowl #1	10260	3/31	33	11.2	15.0	10.3**
Snow Bowl #2	11000	3/31	52	17.2	20.8	19.5**
Wilson Lake	9000	3/29	41	10.8	13.8	9.0**
Mormon Mt. Summit #2	8470	3/31	51	21.0	16.7	---
Agassiz (A)	11200	3/30	67	22.1	25.1	---
† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted Average. (A) Aerial observation: Water content estimated.						

SNOW

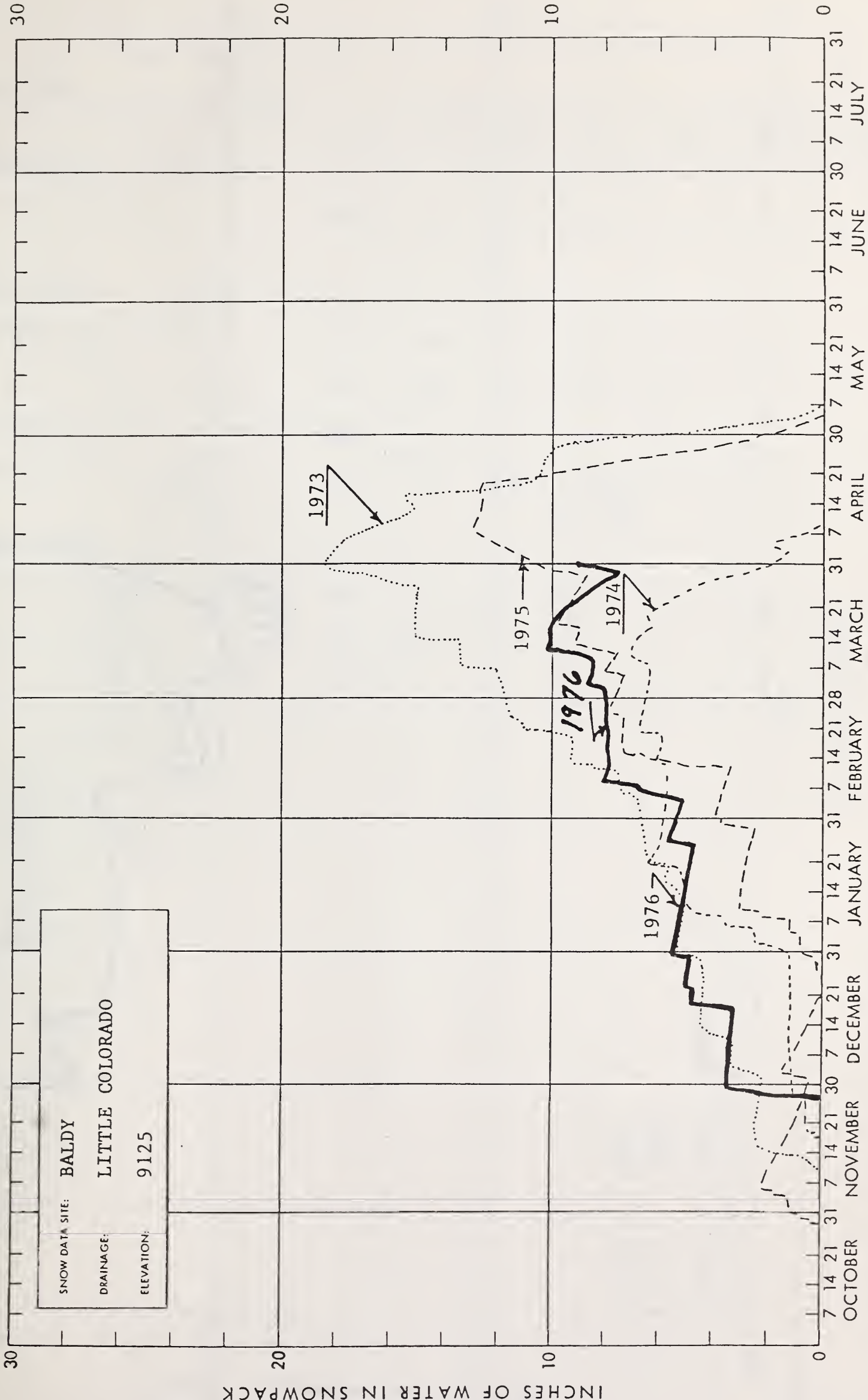
DELAYED REPORTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average †
Agassiz	11200	1/13	27	7.8	---	---
Agassiz	11200	2/1	25	8.0	11.3	---
Agassiz	11200	3/1	60	18.0	15.1	---
Agassiz	11200	3/16	72	21.9	---	---
Inner Basin #1	10000	2/1	26	8.2	9.6	---
Inner Basin #1	10000	3/1	52	17.5	13.7	---
Inner Basin #2	9750	2/1	18	6.0	5.5	---
Inner Basin #2	9750	3/1	40	12.0	7.5	---
Mormon Mountain Summit #2	8470	3/1	58	17.0	11.5	---
Mount Ord	11200	3/5	75	20.2	---	---
Smith Cienega	10050	3/5	50	15.0	---	---

PRECIPITATION (Inches) ABOUT APRIL 1, 1976

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. NOV. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	3/30	2.40	2.41*	12.55	14.23*	88
Hannagan Meadows **	9030	3/31	2.90	2.21	12.00	12.80	94
Frisco Divide **	8000	3/31	1.75	---	7.34	---	--
<u>SALT RIVER</u>							
Canyon Point	7600	3/30	3.22	3.67*	18.53	17.17*	107
Hannagan Meadows **	9030	3/31	2.90	2.21	12.00	12.80	94
Little Wildcat (Heber Snow Course)	7600	3/30	3.07	2.96	17.49	14.46	121
Maverick Fork	9050	3/31	3.31	2.24	14.34	12.26	117
Workman Creek **	6970	3/28	2.86	3.00	18.93	17.28	110
Wilson Lake	9100	3/29	3.58	2.50*	13.17	12.99*	101
<u>VERDE RIVER</u>							
Baker Butte	7300	3/30	3.31	3.37*	19.53	17.32*	113
Copper Basin Divide	6720	3/31	1.62	2.43*	14.07	11.52*	122
Fort Valley **	7350	3/31	1.70	2.06	8.65	9.08	95
Happy Jack **	7480	3/31	2.90	2.27	13.16	11.37	116
Mingus Mountain	7660	3/28	1.80	2.13	12.07	9.99	120
Mormon Mountain	7500	3/31	3.75	3.03*	20.39	16.17*	126
White Horse Lake Jct.**	7150	3/31	2.10	---	14.84	---	---
<u>LITTLE COLORADO</u>							
Inner Basin #1	9830	3/30	3.50	3.01	17.35	15.84	110
Inner Basin #2	10050	3/30	4.30	3.49*	20.42	18.16*	112
Greer Lakes	8500	3/31	1.80	1.15	6.55	7.13	92
Little Wildcat (Heber Snow Course)	7600	3/30	3.07	2.96	17.49	14.46	121
Sheep Crossing (Baldy Snow Course)	9125	3/31	3.24	2.23	12.37	11.90	104
† 1958-72 Average * Adjusted Average ** Data Supplied by U.S. Forest Service							

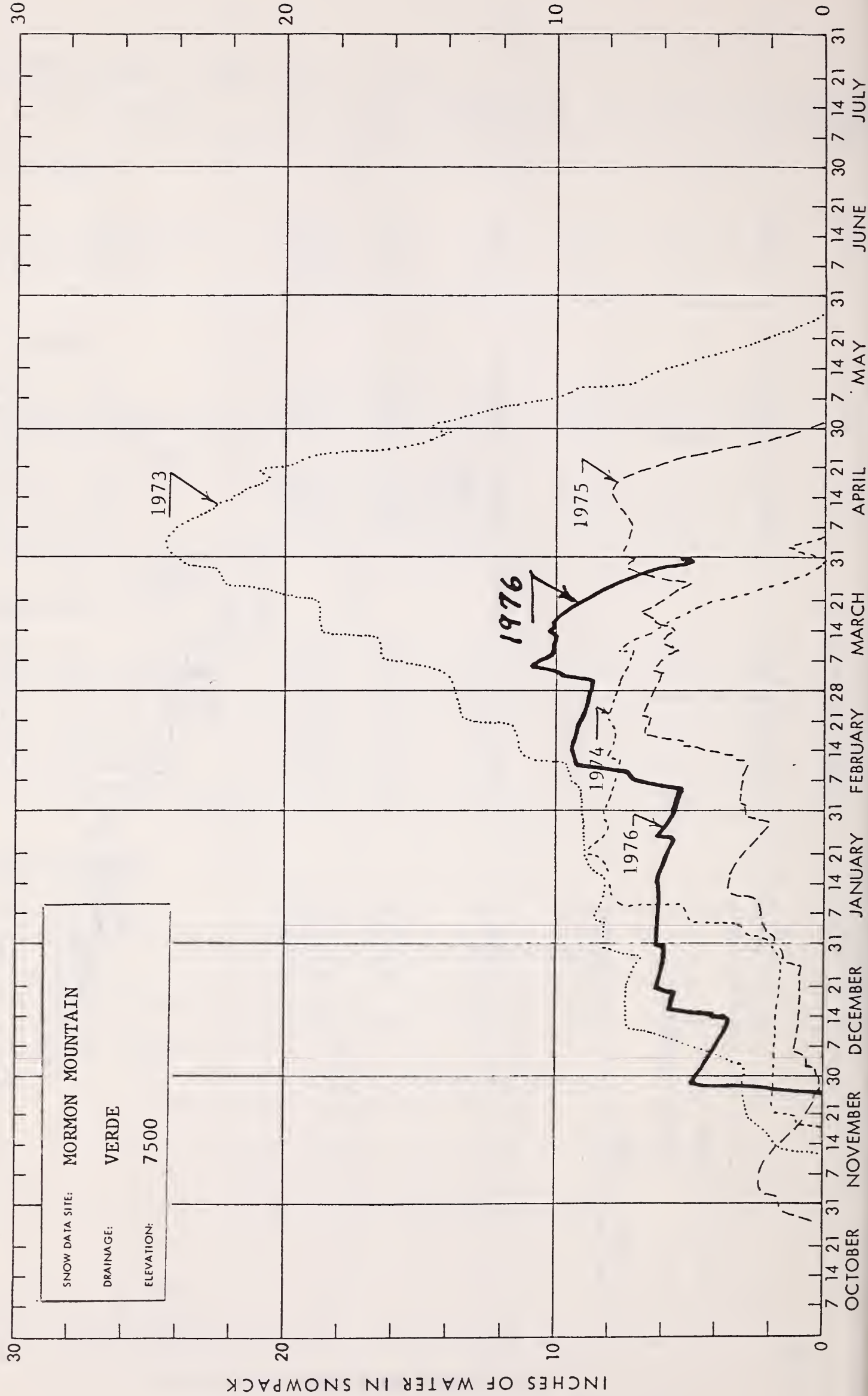
SNOW PILLOW DATA



SNOW DATA SITE: BALDY
 DRAINAGE: LITTLE COLORADO
 ELEVATION: 9125

SNOW PILLOW DATA

1976



SNOW DATA SITE: MORMON MOUNTAIN
DRAINAGE: VERDE
ELEVATION: 7500

INCHES OF WATER IN SNOWPACK

ABOUT APRIL 1, 1976

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average †
<u>GILA RIVER</u>							
Frisco Divide	8000	48	13.3	3/31	12.2	14.6	11.6
<u>SALT RIVER</u>							
Black River Divide	9100	48	16.8	3/31	18.0	18.4	16.9
Canyon Creek	7500	48	18.3	3/30	19.5	18.6	16.1
Corduroy Creek	6000	36	13.5	3/31	14.9	14.9	10.4
McNary	7200	48	16.3	3/30	17.9	17.9	16.1
<u>VERDE RIVER</u>							
Mormon Mountain	7500	48	16.1	3/31	17.8	17.8	16.9
Newman Park	6750	48	17.7	3/31	19.5	19.3	19.4
† 1958-72 15-year Average							

† 1958-1972 period.

SNOW COURSE

SNOW SURVEYOR

Baker Butte #1 and #2	SCS - Dick Enz
Baldy	SCS - Stanton and Kyle
Bear Wallow	Coronado N.F. - Steve Hall
Beaver Head	Apache-Sitgreaves N.F. - Chavez, Monday & McDorman
Bill Williams Intermediate	Kaibab N.F. - Garcia
Bill Williams Summit	Kaibab N.F. - Garcia
Camp Wood	Prescott N.F. - K. Metzger
Canyon Creek	SCS - Dick Enz
Canyon Point	SCS - Dick Enz
Chalender	Kaibab N.F. - L. T. Green
Cheese Springs	SCS - Stanton and Kyle
Copper Basin Divide	SCS - James Neveu
Coronado Trail	Apache-Sitgreaves N.F. - Rising and Ockrassa
Emory Pass #1 and #2	SCS - Garcia and McMaster
Forest Dale	Bureau of Indian Affairs - Endfield and Grippen
Ft. Apache	SCS - Stanton and Kyle
Fort Valley	Rocky Mountain Forest & Range Experiment Station
Frisco Divide	Apache-Sitgreaves N.F. - George Gibbons
Gaddes Canyon	Earl Barto
Grand Canyon	National Park Service - Swift and Briggs
Hannagan Meadows	Apache-Sitgreaves N.F. - Chavez, Monday & McDorman
Happy Jack	Coconino N.F. - Richard Allred
Hawley Lake	Bureau of Indian Affairs - Endfield and Grippen
Heber	SCS - Dick Enz
Hummingbird	Ray Freeman
Inner Basin #1 and #2	SCS (Jorgensen) and City of Flagstaff (Talbot)
Iron Springs	SCS - James Neveu
Lake Mary	SCS - Jorgensen and King
Maverick Fork	SCS - Stanton and Kyle
McKnight Cabin	Ray Freeman
McNary	Bureau of Indian Affairs - Endfield and Grippen
Milk Ranch	Bureau of Indian Affairs - Endfield and Grippen
Mingus Mountain	Earl Barto
Mogollon	James Lyon
Mormon Lake	SCS - Jorgensen and King
Mormon Mountain	SCS - Jorgensen and King
Mt. Ord	Salt River Project and USGS
Newman Park	SCS - Jorgensen and King
Nutrioso	Apache-Sitgreaves N.F. - Rising and Ockrassa
Promontory Butte	SCS - Dick Enz
Redstone Trail	James Lyon
Rose Canyon	Coronado N.F. - Steve Hall
Silver Creek Divide	James Lyon
Smith Cienega	Salt River Project and USGS
Snow Bowl #1 and #2	Coconino N.F. - R. Hughes
State Line	Apache-Sitgreaves N.F. - George Gibbons
Sunrise Summit	SCS - Stanton and Kyle
White Horse Lake Junction	Kaibab N.F. - Garcia
White Spar	SCS - James Neveu
Whitewater	Ray Freeman
Williams Ski Run	Kaibab N.F. - Garcia
Wilson Lake	SCS - Stanton and Kyle
Workman Creek	Rocky Mountain Forest and Range Experiment Station

The Following Organizations Cooperate in the Arizona Snow Survey Work

FEDERAL

- Department of Agriculture
 - Soil Conservation Service
 - Forest Service
 - Apache-Sitgreaves Forest
 - Coconino Forest
 - Coronado Forest
 - Gila Forest
 - Kaibab Forest
 - Prescott Forest
 - Rocky Mountain Forest and Range Experiment Station
 - Tonto Forest
- Department of Commerce
 - NOAA, National Weather Service
- Department of Interior
 - Bureau of Reclamation
 - Region 111
 - Geological Survey
 - Arizona District
 - New Mexico District
 - Bureau of Indian Affairs
 - Fort Apache Reservation
 - San Carlos Irrigation Project
 - National Park Service
 - Grand Canyon National Park
- Gila Water Commissioner
 - Safford, Arizona

STATE

- Arizona Game and Fish Department
- Arizona State Parks Board
- Arizona Water Commission
- University of Arizona
 - Arizona Agricultural Experiment Station
 - Water Resource Research Center
 - Department of Watershed Management

MUNICIPAL

- City of Flagstaff

IRRIGATION PROJECTS

- Salt River Valley Water User's Association
 - Phoenix, Arizona
- San Carlos Irrigation and Drainage District
 - Coolidge, Arizona
- Maricopa County Municipal Water Conservation District

PRIVATE

- Southwest Forest Industries, Inc.
 - McNary, Arizona
- Fort Apache Indian Reservation
 - White Mountain Recreation Enterprises

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ROOM 6029 FEDERAL BUILDING
PHOENIX, ARIZONA 85025
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



FIRST CLASS MAIL

**FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS**

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*